and clean them"; D. Turner, ed., *Extracts from the Literary and Scientific Correspondence of Richard Richardson* (Yarmouth, 1835), 52. I am grateful to Mr. T. G. Howarth for calling my attention to these glass-mounted insects.

[28]The note is in Sloane 3338, f.2r.

[29]Eleazar Albin, *A Natural History of English Insects* (London, 1720), text to pl. 35.

[30]*Ibid.*, text to pl. 58.

[31]*Ibid.*, text to pl. 68.

[32]*Ibid.*, text to pl. 67.

[33]P. B. M. Allan, *A Moth-Hunter's Gossip* (London, 1937), 263.

Aberrations of British Macrolepidoptera

By A. L. Goodson

(Plate V)

The aberrations named and described in this paper are in the Rothschild-Cockayne-Kettlewell collection in the British Museum Natural History.

Setina irrorella Linnaeus ab. *nigromarginata* ab. nov. (fig. 1)

On the forewing the three black spots of the antemedian row are lengthened into rather thick streaks which reach the base. The spots of the postmedian row are also lengthened into black neural streaks which reach the outer margin, the interneural spaces being also darkened so that a wide dark transverse marginal band is formed, clean cut on its inner side and leaving a prominent median band of clear yellow between it and the dark basal markings. The hindwing also shows a wide dusky band, which does not quite reach the outer margin.

The specimen is mentioned in Barrett Lep. Brit. vol. 2, p. 205.

Type ♂. Near Croydon, June 1868 (Bond coll.).

Nola strigula Schiffermüller ab. *nigrotransversa* ab. nov. (fig. 2)

On the forewing there is a black transverse band which fills the space between the antemedian line and the base, and a second black band occupying the space between the postmedian line and the margin. The area between these two black bands is of normal whitish-grey ground colour, standing out as a median band in striking contrast to the rest of the wing. Hindwing somewhat darker than usual.

Type ♂. S. Wilts., 23rd July 1954. P. J. Burton.

Explanation of Plate.

(Left to right.)

Fig. 1. *Setina irrorella* ab. *nigromarginata* ♂. Type.
Fig. 2. *Nola strigula* ab. *nigrotransversa* ♂. Type.
Fig. 3. *Eupithecia venosata* subsp. *ochraceae* ab. *mediolinea* ♀. Type.
Fig. 4. *Plusia gamma* ab. *fuscescens* ♂. Type.
Fig. 5. *Tholera cespitis* ab. *bicolor* ♂. Type.
Fig. 6. *Luperina testacea* ab. *nigrotransversa* ♂. Type.
Fig. 7. *Argynnis euphrosyne* ab. *nigricosta* ♂. Type.
Fig. 8. *Argynnis euphrosyne* ab. *melanoradiata* ♂. Type.
Fig. 9. *Argynnis euphrosyne* ab. *nigromarginata* ♂. Type.
Fig. 10. *Thecla quercus* ab. *infraobscura* ♂. Type.

Eupithecia venosata subsp. *ochracae* Gregson ab. *mediolinea* ab. nov. (fig. 3)

On the forewing the basal, antemedian, and postmedian black lines, are completely absent, the median line however remains and is well developed. The only other markings on the wing are the antemarginal line, with its series of short horizontal bars. The aberration is not necessarily confined to the subsp. *ochracae* and the name would apply to such specimens in other races.

Type ♀. Kirk Point, Lambholm, Orkney, bred 13th May 1962. Kettlewell & Cadbury.

Plusia gamma Linnaeus ab. *fuscescens* ab. nov. (fig. 4)

Both fore and hindwing with an overlay of coppery-brown which darkens the normally light areas, giving an unicolorous appearance. The silver gamma mark is dull brownish-gold. The coppery-brown is particularly noticeable on the normally light area of the hindwing, the marginal band being only slightly darker and therefore not contrasting.

Type ♂. Freshwater Bay, I. of Wight, 10th October 1955. Kettlewell & Goodson.

Tholera cespitis Schiffermüller ab. *bicolor* ab. nov. (fig. 5)

On the forewing the normal blackish colour is replaced by grey and confined chiefly to the median area. The base is grey but well cut by a pale yellowish-brown horizontal streak, shaped as an elongated diamond, which continues outwards to cut through the grey median area as a thinner streak. In the median area the orbicular and reniform stand out strikingly as blind "eyes", pale yellow brown and completely lacking the usual dark centres. The antemedian and postmedian lines which bound this area are conspicuously black, contrasting with the paler grey. The outer part of the wing is pale grey, divided by a wide, transverse, submarginal band of pale yellow-brown. Hindwing normal. The insect, with its contrasting two shades, appears very much paler and completely lacks the normal aspect of cespitis.

Type ♂. Tring, Herts., 19th August 1958. A. L. Goodson.

Luperina testacea Schiffermüller ab. *nigrotransversa* ab. nov. (fig. 6)

On the forewing there is a wide black transverse band filling the space between the antemedian line and the base, except for a very narrow band of normal pale brown ground colour at the extreme base of the wing. The outer third of the wing, from the post-median line to the margin, is also black, forming a second wide band, leaving the space between the two black bands pale brown, contrasting strongly. The orbicular is normal with a faint dark ring, but the reniform is filled with black. The hindwing is even more remarkable, possessing a wide grey-black marginal band which occupies one-third of the wing. The fringes of the forewing are pale brown, those of the hindwing yellowish-white.

Type ♂. Bury St. Edmunds, 13th August 1962. R. Eley.

This remarkable aberration was collected at m.v. light in company with a number of typical testacea but examination of the genitalia was necessary to ensure that it was of this species. I have to thank Mr. N. Bennett of the British Museum Natural History and Mons. Charles Boursin of Paris for their assistance in this determination. The specimen was generously presented to the collection by its captor, Mr. R. Eley.

Argynnis euphrosyne Linnaeus ab. *nigricosta* ab. nov. (fig. 7)

Forewing with the costal area black from base almost to the apex, forming a thick bar or streak. The inner margin also shows a similar black bar, not quite reaching the base. The normal spots in the centre of the wing are absent but the submarginal ones are present and elongated, the marginal chevrons are filled in with black. Hindwing black except at the margin which is of normal ground colour but heavily rayed with a series of black neural streaks, stretching outwards from the black area to the margin.

Type ♂. Hants, 21st May 1921. F. A. Parker.

Argynnis euphrosyne Linnaeus ab. *melanoradiata* ab. nov. (fig. 8)

Forewing black for two-thirds of the wing with a scattering of golden scales at the base. The marginal third is of normal orange-brown ground colour, rayed with thick black neural bars which extend outwards from the black area to the margin which is narrowly black. Hindwing almost wholly black, only a trace of orange-brown towards the costa, the marginal third of the wing is less black between the veins which are visible as dark rays on the somewhat lighter area.

Type ♂. Worth Forest, 11th May 1946. L. A. E. Sabine.

Argynnis euphrosyne Linnaeus ab. *nigromarginata* ab. nov. (fig. 9)

The main character of this aberration is the continuous black border on all wings, with little or no trace of the orange-brown between the marginal chevrons. The type specimen is somewhat aberrant in other markings but the name is given only to the black bordering.

Type ♂. Lincoln, June 1930. C. W. Sperring.

Thecla quercus Linnaeus ab. *infraobscura* ab. nov. (fig. 10)

The underside of all wings blackish-grey instead of the normal ashy-grey. The usual markings are present but the transverse stripes completely lack the white bordering on the outer side, giving the insect a curiously dull appearance.

Type ♂. Hangers Wood, Beds., 15th June 1909.

Notes on some Butterflies seen in Yugoslavia, July 1963

By T. R. New

There have been several papers published in recent years on the butterflies of Yugoslavia, e.g. Lipscombe (1958, 1959 and 1961) and Birkett (1964). The latter author considered that a visit during July might well prove rewarding entomologically, and as the following list shows, this is indeed the case. The writer was fortunate enough to spend the first two weeks of July, 1963, in Yugoslavia, during which period butterflies, amongst other insects, were collected.

The first nine days were spent at the Institute of Oceanography at Split, Dalmatia—a typical Karst coast region, rising steeply from the sea and giving way some two hundred yards from it to thick forests of *Pinus halepensis*. The season was generally well advanced, and much of the low vegetation was already dying off. No rain fell during the period of